## ABSTRACT OF THE DISCLOSURE

A motion control system comprises a motion unit having a motor connected to an encoder and an amplifier. The motion control system further comprises a scalable motion controller connected to the motion unit wherein the scalable motion controller receives signals from the encoder and outputs signals to the amplifier. The scalable motion controller comprises a plurality of dip sockets arranged for inserting and removing one or more motion control processors and a connector interface comprising a plurality of male and female connectors arranged for stacking a plurality of motion controllers.